

Mail Stop 6010

January 26, 2009

Robert I. Blum
President and Chief Executive Officer
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080

**Re: Cytokinetics, Incorporated
Form 10-K
Filed March 12, 2008
Response to Comment Letter filed January 16, 2009
File No. 000-50633**

Dear Mr. Blum:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Schedule 14A

Executive Compensation, page 23

1. We note your response to our original comment contains some individual and corporate goals and their relation to elements of compensation. However, certain phrases like, "such as" and "for example" indicate that the goals listed here are not a comprehensive list of those used in determining executive compensation. Please revise your disclosure in this section further to include all the individual and corporate goals for the named executive officers that contributed to their

compensation, and clarify how the level of achievement of those goals related to the level of compensation awarded to each named executive officer. Also, please disclose the individual achievement level attained by Dr. Wolff as you have for the other two named executive officers whose compensation was based on individual goals.

* * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response.

Please contact Mike Rosenthal at 202-551-3674 or me at 202-551-3715 with any other questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director